

PATENT  
8035-1003

**IN THE U.S. PATENT AND TRADEMARK OFFICE**

In re application of: Yasunori MURAKAMI et al.

Appl. No.: **NEW** Group:

Filed: March 5, 2002 Examiner:

For: GASKET FOR HIGH-TEMPERATURE JOINT AND  
METHOD OF FABRICATING THE SAME

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents March 5, 2002  
Washington, DC 20231

Sir:

The following preliminary amendments and remarks are respectfully submitted in connection with the above-identified application.

**IN THE SPECIFICATION:**

Please replace paragraph [0018] beginning on page 6, with the following rewritten paragraph:

--[0018] Moreover, as defined in claim 8, it is preferable that the reinforcing member and the aqueous solution of any of the heat-resistant filler and the heat-resistant antifriction material are severally deaerated under reduced pressure atmosphere and the reinforcing member is immersed into the aqueous solution under reduced pressure

atmosphere in the step of filling any of the heat-resistant filler and the heat-resistant antifriction material in the state of the aqueous solution into the gaps of the metallic reinforcing member in the foregoing fabricating method. In this way, it is surely possible to prevent bubbles from remaining inside the heat-resistant filler, whereby strength of the gasket basic substance can be enhanced.--

Please replace paragraph [0029] beginning on page 9,  
with the following rewritten paragraph:

--[0029] Instead of the above-described Step S3, as a reduced pressure immersion a low-pressure immersion process of the heat-resistant filler may be performed in Step S4. This low-pressure immersion process is conducted in accordance with the following processes of: putting the reinforcing member 4, which is the preliminarily molded part of the simple wire fabric, and the aqueous solution of the heat-resistant filler separately into a decompression chamber preferably at 10 Torr or less for deaerating physically-adsorbed gas and dissolved gas, respectively; immersing the preliminarily molded wire fabric for about 5 minutes into the aqueous solution of the heat-resistant filler rendered flowable by agitation in the decompression chamber at a decompression value similar to the foregoing in order to fill the aqueous solution of the heat-resistant filler into the gaps of the reinforcing member 4 made of the preliminarily molded wire fabric; and pulling out

the reinforcing member 4 after the heat-resistant filler is solidified inside and around the reinforcing member 4 according to the thixotropic phenomenon.--

Please replace paragraph [0044] beginning on page 15, with the following rewritten paragraph:

--[0044] Furthermore, according to the fabricating method of this embodiment, the above-described Step S4 can be adopted when the heat-resistant filler 7 in the state of the aqueous solution mainly composed of diatomaceous earth is filled into the gaps of the meshed metallic reinforcing member 4, whereby the reinforcing member 4 and the aqueous solution of the heat-resistant filler 7 are severally deaerated under reduced pressure atmosphere and then the reinforcing member 4 is immersed into the aqueous solution of the heat-resistant filler 7. In this way, it is surely possible to prevent bubbles from remaining inside the heat-resistant filler 7, whereby strength of the gasket basic substance 8 can be enhanced.--

Please replace paragraph [0049] beginning on page 16, with the following rewritten paragraph:

--[0049] Instead of an atmospheric immersion process, as a reduced pressure immersions a low-pressure immersion process of the heat-resistant antifriction material may be performed

in Step S12. This low-pressure immersion process is conducted in accordance with the following processes of: putting the reinforcing member 4, which is the preliminarily molded part of the simple wire fabric, and the aqueous solution of the heat-resistant antifriction material separately into a decompression chamber preferably at 10 Torr or less for deaerating physically-adsorbed gas and dissolved gas, respectively; immersing the preliminarily molded wire fabric for about 5 minutes into the aqueous solution of the heat-resistant antifriction material rendered flowable by still standing in the decompression chamber at a decompression value similar to the foregoing in order to fill the aqueous solution of the heat-resistant antifriction material into the gaps of the reinforcing member 4 made of the preliminarily molded wire fabric; and pulling out the reinforcing member 4 after the heat-resistant antifriction material is solidified inside and around the reinforcing member 4 according to the dilatancy phenomenon by agitating the heat-resistant antifriction material vigorously.--

Please replace paragraph [0058] beginning on page 19, with the following rewritten paragraph:

--[0058] Furthermore, according to the fabricating method of this embodiment, if the reinforcing member 4 and the aqueous solution of the heat-resistant antifriction material 11

are severally deaerated under reduced pressure atmosphere and then the reinforcing member 4 is immersed into the aqueous solution of the heat-resistant antifriction material 11 when the heat-resistant antifriction material 11 in the state of the aqueous solution mainly composed of the mixture of boron nitride and polytetrafluoroethylene resin is filled into the gaps of the meshed metallic reinforcing member 4, then it is surely possible to prevent bubbles from remaining inside the heat-resistant antifriction material 11, whereby strength of the gasket basic substance 12 can be enhanced.--

IN THE CLAIMS:

Please amend the claims as follows:

--3. (Amended) The gasket for a high-temperature joint according to claim 1, wherein said meshed metallic reinforcing member is made of metallic wires.

8. (Amended) The method of fabricating a gasket for a high-temperature joint according to claim 4, wherein said reinforcing member and said aqueous solution of any of the heat-resistant filler and the heat-resistant antifriction material are severally deaerated under low-pressure atmosphere and then said reinforcing member is immersed into said aqueous solution under low-pressure atmosphere in said step of filling

any of said heat-resistant filler and said heat-resistant antifriction material in the state of said aqueous solution into said gaps of the metallic reinforcing member.--

REMARKS

Claims 1-9 are pending in the present application.

Entry of the above amendments is earnestly solicited.

An early and favorable first action on the merits is earnestly requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

*Benoit Castel*

---

Benoit Castel, Reg. No. 35,041

745 South 23<sup>rd</sup> Street  
Arlington, VA 22202  
Telephone (703) 521-2297

BC/bam  
Attachments

VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE SPECIFICATION:

Paragraph [0018] on page 6, has been amended as follows:

**[0018]** Moreover, as defined in claim 8, it is preferable that the reinforcing member and the aqueous solution of any of the heat-resistant filler and the heat-resistant antifriction material are severally deaerated under ~~low pressure~~reduced pressure atmosphere and the reinforcing member is immersed into the aqueous solution under ~~low pressure~~reduced pressure atmosphere in the step of filling any of the heat-resistant filler and the heat-resistant antifriction material in the state of the aqueous solution into the gaps of the metallic reinforcing member in the foregoing fabricating method. In this way, it is surely possible to prevent bubbles from remaining inside the ~~heat-~~ heat-resistant filler, whereby strength of the gasket basic substance can be enhanced.

Paragraph [0029] on page 9, has been amended as follows:

**[0029]** Instead of the above-described Step S3, as a reduced pressure immersion a low-pressure immersion process of the heat-resistant filler may be performed in Step S4. This low-pressure immersion process is conducted in accordance with the following processes of: putting the reinforcing member 4,

which is the preliminarily molded part of the simple wire fabric, and the aqueous solution of the heat-resistant filler separately into a decompression chamber preferably at 10 Torr or less for deaerating physically-adsorbed gas and dissolved gas, respectively; immersing the preliminarily molded wire fabric for about 5 minutes into the aqueous solution of the heat-resistant filler rendered flowable by agitation in the decompression chamber at a decompression value similar to the foregoing in order to fill the aqueous solution of the heat-resistant filler into the gaps of the reinforcing member 4 made of the preliminarily molded wire fabric; and pulling out the reinforcing member 4 after the heat-resistant filler is solidified inside and around the reinforcing member 4 according to the thixotropic phenomenon.

Paragraph [0044] on page 15, has been amended as follows:

**[0044]** Furthermore, according to the fabricating method of this embodiment, the above-described Step S4 can be adopted when the heat-resistant filler 7 in the state of the aqueous solution mainly composed of diatomaceous earth is filled into the gaps of the meshed metallic reinforcing member 4, whereby the reinforcing member 4 and the aqueous solution of the heat-resistant filler 7 are severally deaerated under ~~low-~~  
pressurereduced pressure atmosphere and then the reinforcing member 4 is immersed into the aqueous solution of the heat-

resistant filler 7. In this way, it is surely possible to prevent bubbles from remaining inside the heat-resistant filler 7, whereby strength of the gasket basic substance 8 can be enhanced.

Paragraph [0049] on page 16, has been amended as follows:

**[0049]** Instead of an atmospheric immersion process, as a reduced pressure immersions a low-pressure immersion process of the heat-resistant antifriction material may be performed in Step S12. This low-pressure immersion process is conducted in accordance with the following processes of: putting the reinforcing member 4, which is the preliminarily molded part of the simple wire fabric, and the aqueous solution of the heat-heat-resistant antifriction material separately into a decompression chamber preferably at 10 Torr or less for deaerating physically-adsorbed gas and dissolved gas, respectively; immersing the preliminarily molded wire fabric for about 5 minutes into the aqueous solution of the heat-resistant antifriction material rendered flowable by still standing in the decompression chamber at a decompression value similar to the foregoing in order to fill the aqueous solution of the heat-resistant antifriction material into the gaps of the reinforcing member 4 made of the preliminarily molded wire fabric; and pulling out the reinforcing member 4 after the heat-resistant antifriction material is solidified inside and

around the reinforcing member 4 according to the dilatancy phenomenon by agitating the heat-resistant antifriction material vigorously.

Paragraph [0058] on page 19, has been amended as follows:

**[0058]** Furthermore, according to the fabricating method of this embodiment, if the reinforcing member 4 and the aqueous solution of the heat-resistant antifriction material 11 are severally deaerated under ~~low pressure~~ reduced pressure atmosphere and then the reinforcing member 4 is immersed into the aqueous solution of the heat-resistant antifriction material 11 when the heat-resistant antifriction material 11 in the state of the aqueous solution mainly composed of the mixture of boron nitride and polytetrafluoroethylene resin is filled into the gaps of the meshed metallic reinforcing member 4, then it is surely possible to prevent bubbles from remaining inside the heat-resistant antifriction material 11, whereby strength of the gasket basic substance 12 can be enhanced.

IN THE CLAIMS:

The claims have been amended as follows:

~~3. The~~ 3. (Amended) The gasket for a high-temperature joint according to ~~any one of claims 1 and 2, claim 1,~~ wherein

said meshed metallic reinforcing member is made of metallic wires.

8. ~~The~~<sup>8.</sup> (Amended) The method of fabricating a gasket for a high-temperature joint according to ~~any one of claims 4 to 7, claim 4,~~ wherein said reinforcing member and said aqueous solution of any of the heat-resistant filler and the ~~heat-resistant~~ ~~resistant~~ antifriction material are severally deaerated under low-pressure atmosphere and then said reinforcing member is immersed into said aqueous solution under low-pressure atmosphere in said step of filling any of said ~~heat~~-~~heat~~-resistant filler and said heat-resistant antifriction material in the state of said aqueous solution into said gaps of the metallic reinforcing member.